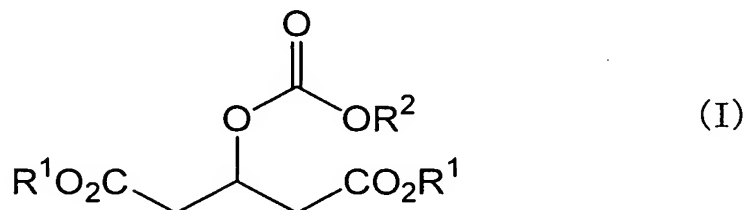


Claims

1. A 3-substituted oxyglutaric acid diester compound represented by the formula (I):



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wherein R^1 may be the same or different from each other, and represents a substituted or unsubstituted alkyl group, R^2 represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group or a substituted or unsubstituted aryl group.

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2. The compound according to Claim 1, wherein R^1 is a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms.

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3. The compound according to Claim 1, wherein R^1 is a methyl group or an ethyl group.

4. The compound according to Claim 1, wherein R^2 is a group selected from the group consisting of a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms, an alkenyl group having 2 to 10 carbon atoms, a substituted or unsubstituted benzyl group, a phenethyl group, a phenyl group, a naphthyl group, an anthracenyl group and a thienyl group.

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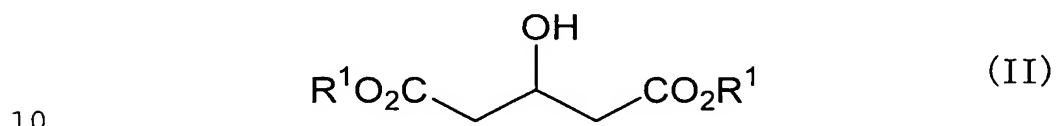
5. The compound according to Claim 1, wherein R^2 is a group selected from the group consisting of a benzyl group, a 2-methylbenzyl group, a 3-methylbenzyl group, a 4-methylbenzyl group, a 2-methoxybenzyl group, a 3-methoxybenzyl group, a 4-methoxybenzyl group, a 2-chlorobenzyl group, a 3-chlorobenzyl group, a 4-chlorobenzyl group, a 2-bromobenzyl group, a 3-bromobenzyl group, a 4-bromobenzyl group, a 2-fluorobenzyl group, a 3-fluorobenzyl group, a 4-fluoro-

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benzyl group, a 2-nitrobenzyl group, a 3-nitrobenzyl group,
 a 4-nitrobenzyl group, a 2-methoxybenzyl group, a 3-
 methoxybenzyl group, a 4-methoxybenzyl group, a t-butyl
 group, a methyl group, an isopropyl group, a phenyl group,
 5 a vinyl group and an allyl group.

6. A process for preparing a 3-substituted oxyglutaric
 acid diester compound according to Claim 1, which comprises
 reacting a 3-hydroxyglutaric acid diester represented by
 the formula (II):



wherein R^1 may be the same or different from each
 other, and represents a substituted or unsubstituted
 alkyl group,

and a halogenoformate represented by the formula (III):



wherein X represents a halogen atom, R^2 represents a
 substituted or unsubstituted alkyl group, a substi-
 tuted or unsubstituted alkenyl group, a substituted
 or unsubstituted aralkyl group or a substituted or
 20 unsubstituted aryl group,

in the presence of a base.

7. The process according to Claim 6, wherein the halogeno-
 formate is benzyl chloroformate.

8. The process according to Claim 6, wherein the halogeno-
 25 formate is used in an amount of 0.1 to 3.0 mols per mol of
 the 3-hydroxyglutaric acid diester.

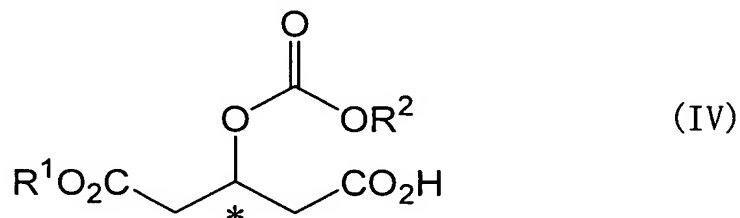
9. The process according to Claim 6, wherein the base is
 an organic base.

10. The process according to Claim 6, wherein the organic
 30 base is a tertiary amine.

11. The process according to Claim 6, wherein the base is
 used in an amount of 1.0 to 3.0 mols per mol of the 3-

hydroxyglutaric acid diester.

12. An optically active 3-substituted oxyglutaric acid monoester compound represented by the formula (IV):



5 wherein R^1 represents a substituted or unsubstituted alkyl group, R^2 represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group or a substituted or unsubstituted aryl group.

10 13. The compound according to Claim 12, wherein R^1 is a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms.

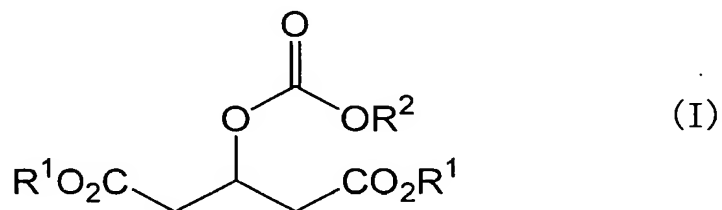
15 14. The compound according to Claim 12, wherein R^1 is a methyl group or an ethyl group.

15 15. The compound according to Claim 12, wherein R^2 is a group selected from the group consisting of a substituted or unsubstituted alkyl group having 1 to 10 carbon atoms, an alkenyl group having 2 to 10 carbon atoms, a substituted or unsubstituted benzyl group, a phenethyl group, phenyl group, a naphthyl group, an anthracenyl group and a thienyl group.

20 16. The compound according to Claim 12, wherein R^2 is a group selected from the group consisting of a benzyl group, a 2-methylbenzyl group, a 3-methylbenzyl group, a 4-methylbenzyl group, a 2-methoxybenzyl group, a 3-methoxybenzyl group, a 4-methoxybenzyl group, a 2-chlorobenzyl group, a 3-chlorobenzyl group, a 4-chlorobenzyl group, a 2-bromobenzyl group, a 3-bromobenzyl group, a 4-bromobenzyl group, a 2-fluorobenzyl group, a 3-fluorobenzyl group, a 4-fluorobenzyl group, a 2-nitrobenzyl group, a 3-nitrobenzyl group, a 4-nitrobenzyl group, a 2-methoxybenzyl group, a 3-

methoxybenzyl group, a 4-methoxybenzyl group, a t-butyl group, a methyl group, an isopropyl group, a phenyl group, a vinyl group and an allyl group.

17. A process for preparing an optically active 3-substituted oxyglutaric acid monoester compound according to Claim 12, which comprises selectively hydrolyzing one of ester groups of a 3-substituted oxyglutaric acid diester compound represented by the formula (I):



- 10 wherein R^1 represents a substituted or unsubstituted alkyl group, R^2 represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group or a substituted or unsubstituted aryl group,

15 in the presence of a hydrolase.

18. The preparation process according to Claim 17, wherein the hydrolase is a protease, an esterase or a lipase.

19. The preparation process according to Claim 17, wherein
20 the hydrolase is a lipase originated from *Candida antarctica*.

20. The preparation process according to Claim 17, wherein the hydrolysis is carried out in water, in a buffer or in an aqueous inorganic base solution.